

***Poilannammia* C. Hansen (Melastomataceae),
a new genus of four new species endemic to Vietnam**

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Summary : Descriptions are given of *Poilannammia* C. Hansen belonging to the *Sonerileae* s.l. and its four species, *P. costata* C. Hansen, *P. trimera* C. Hansen, *P. allomorphioidea* C. Hansen, and *P. incisa* C. Hansen, all endemic to Vietnam. Parts of flowers and fruits and the distribution of the four species are illustrated. A key to the species is given.

Résumé : Description de *Poilannammia* C. Hansen appartenant aux *Sonerileae* s.l. et de ses quatre espèces, *P. costata* C. Hansen, *P. trimera* C. Hansen, *P. allomorphioidea* C. Hansen et *P. incisa* C. Hansen, toutes du Viêt-Nam. Des détails des fleurs et des fruits et les aires de distribution des quatre espèces sont figurés. Une clé des espèces est présentée.

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POILANNAMMIA C. Hansen, *gen. nov.*

Bene distincta inflorescentia terminali thyrsioidea, antheris cum appendicibus et dorsaliter et ventraliter, appendicibus, saltem staminum episepalinorum, corpus V-simulans insertionem filamenti amplexans formantibus, atque lobis coronae ovarii plus minusve fissis et bidentatis

TYPE-SPECIES : *P. costata* C. Hansen.

Shrubs or small trees to 6 m high, generally looking glabrous. Stem terete or often flat distally, with minute glandular hairs, substellate or not, dense or not, and rarely patent stout shaggy hairs, when young, glabrous when older; internodes 0.5-6 cm long. Leaves opposite, decussate, isomorphic and equal to subequal in a pair, usually somewhat coriaceous; petioles 1-7.5 cm long; blade ovate to elliptic (3.8-)6.5-30 × (1.6-)4.3-12 cm; base rounded to acute to very broadly acuminate, apex shortly acuminate, margin entire or very slightly bluntly dentate, glabrous; 3-nerved or slightly 3-plinerved with an additional faint pair of intramarginal nerves, above and below clothed as stem and petiole, though usually sparser, when young, above soon glabrous, below with reminiscences of young indumentum or glabrous.

Inflorescence a terminal thyrse, wide and usually large and many-flowered, to 18 cm long; peduncle quadrangular or flat, (1.3-)5-10.5 cm long; bracts subulate or wide and boat-shaped, to 1.5 mm long, rarely basal pair ovate, 5 mm long; pedicels from 1 mm long in bud to 5 mm long in fruit. Flowers actinomorphic, 3- or 4-merous, bisexual. Hypanthium campanulate to urceolate, often narrow, strongly to faintly ribbed or sulcate, 3-3.5 × 1.2-2 cm, with minute brown glandular hairs, substellate or not. Sepals low, rounded, slightly connate, very

conspicuously conically thickened dorsally, usually less than 1 mm long, clothed as hypanthium, persistent at maturity or persistency unknown. Petals insufficiently known, except in *P. costata*, pink or white (according to labels). Stamens 6 or 8, isomorphic or dimorphic, unequal or subequal; filaments glabrous; appendages of the episeptal whorl of stamens together forming a V-shaped body with the filament inserted in the bottom of the cleft of the V, ventrally not adnate to the anther sacs, those of the epipetalar whorl similar or differentiated into a long narrow dorsal spur and two short ventral lobes adnate to the anther sacs for most of their length; pore 1. Ovary 3- or 4-locular; anther pockets to base or almost; crown of 4 only partly connate slightly to much cleft lobes; placentas protruding on short thick stalks, rarely vertically elongated. Fruit known only in *P. allomorphioidea*.

Characters, beside those given in the diagnosis, which may be helpful in distinguishing *Poilannammia* are the coriaceous leaves (least so in *P. incisa*) and the large many- and small-flowered thyrses (again *P. incisa* is an exception).

Poilannammia shows no clear relationship to any other genus. In the ribbed fruit (Fig. 1, G) it resembles *Allomorphia* and habitually also some members of that genus. It differs distinctly, however, in having ventral staminal appendages (Fig. 1, C-E; 3, E-I), which are unknown in *Allomorphia*. Its inflorescence is a true thyrse, i.e. a branched system of compound dichasia, as in many *Allomorphia* species, large and many-flowered in three species, but small and few-flowered in the fourth (*P. incisa*).

The inflorescence, excluding the peduncle, appears to be wider than long in all species. In *P. incisa* it is in principle composed of a central axis (rachis) with a terminal and a lower node, the latter with two opposite long branches. Rachis and the branches each have three short branchlets at their terminal node, and each of these have a short-pedicelled flower again at their terminal node. The inflorescence in the other three species resembles the thyrse illustrated by LAWRENCE (1963, fig. 3, e), but is more compound, e.g. the branches of third order. Besides the flowers are clustered at the end of the branches, and not in single dichasia as illustrated by LAWRENCE, which may be interpreted in the way that the branches have contracted distally, so that two or three dichasia crowd there.

The stamens of *Poilannammia* may resemble those of some species of *Phyllagathis*, but in that genus inflorescences as described above are never found. The fruit also differs, and habitually there is no resemblance at all.

The crown (HANSEN, 1985) is characteristic in that the lobes are only partly connate and in that each lobe is cleft so that it becomes bidentate (Fig. 1, F, I; 3, B-D). Neither feature is unique, but is valuable generically in *Poilannammia*.

In regard to the descriptions it should be noticed that flowers are known only in *P. costata*. In the three other species the floral parts are known only from buds, mostly young ones. Fruits are found only in *P. allomorphioidea*.

Poilannammia is represented only by nine collections from Vietnam kept at the Laboratoire de Phanérogamie, Muséum national d'Histoire naturelle, Paris. The name of the new genus has been made in memory of POILANE and his favorite area of collecting : Annam.

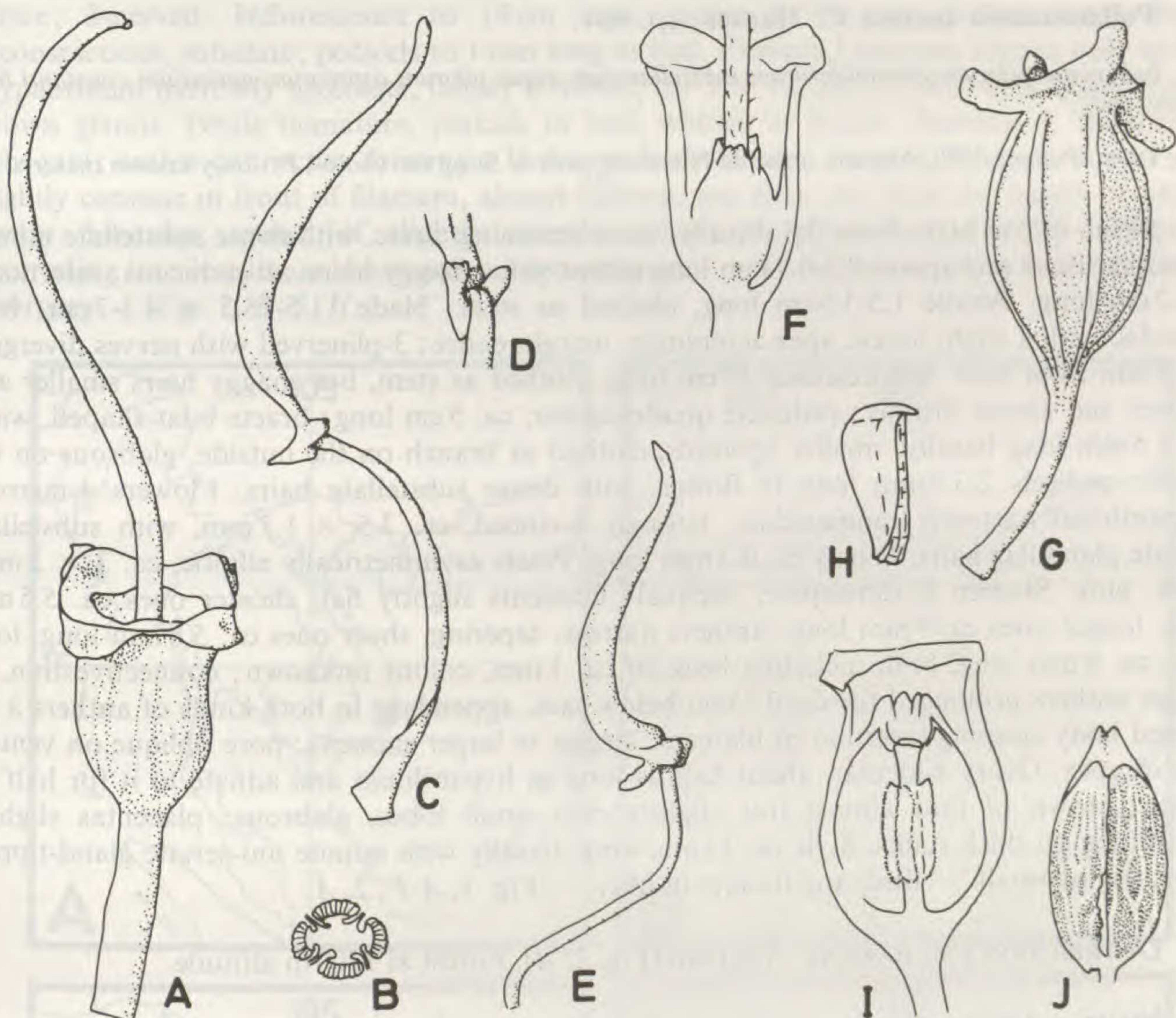


Fig. 1. — *Poilannammia*, parts of buds, flowers and fruits. — *P. costata*: A, flower with petals and stamens removed; B, transverse section of central part of ovary showing placentas with ovules and part of septa in between; C, episepalar stamen laterally; D, appendages of episepalar stamen ventrally from below; E, epipetalar stamen laterally; F, longitudinal section of flower showing indumentum on base of style, top of ovary with bidentate crown lobes, basal delimitation of ovary, and one anther pocket. — *P. allomorphioides*: G, mature fruit; H, seed; I, longitudinal section of fruit (seeds removed) showing the bidentate top of two valves and the central part with three placentas visible; J, a valve from a fruit with the vascular bundles prominent on the inside. (A-F, *Poillane* 3770 in P; G-J, *Chevalier* 38848 in P. — B, ca. $\times 10$; H, ca. $\times 20$; all others, ca. $\times 6$).

KEY TO THE SPECIES OF POILANNAMMIA

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| 1. Flowers 3-merous..... | <i>P. trimera</i> |
| 1'. Flowers 4-merous. | |
| 2. Inflorescence little compound and few-flowered (in the order of 10 flowers) | <i>P. incisa</i> |
| 2'. Inflorescence much compound and many-flowered (in the order of 50 or more). | |
| 3. Indumentum of minute glandular hairs..... | <i>P. allomorphioides</i> |
| 3'. Indumentum of substellate minute glandular hairs and patent stout shaggy hairs | <i>P. costata</i> |

Poilannammia costata C. Hansen, *sp. nov.*

Indumento pilorum glanduliferorum substellatorum atque pilorum asperorum patentium constanti bene dignoscenda.

TYPE : *Poilane* 3770, Annam, ouest de Nhatrang près de Song tan (holo-, P); only known material.

Shrub to 3 m high. Stem flat distally, soon becoming terete, with dense substellate minute glandular hairs and sparse 0.3-0.7 mm long patent stout shaggy hairs, all caducous; internodes 1.5-2 cm long. Petiole 1.5-3.5 cm long, clothed as stem; blade 11.5-15.5 × 4.3-7 cm; base rounded with a slight notch, apex acuminate, margin entire; 3-plinerved with nerves diverging ca. 5 mm from base. Inflorescence 16 cm long, clothed as stem, but shaggy hairs smaller and sparser and absent distally; peduncle quadrangular, ca. 5 cm long; bracts boat-shaped, wide, ca. 1.5 mm long basally, smaller upwards, clothed as branch on the outside, glabrous on the inside; pedicels 2-3.5 mm long in flower, with dense substellate hairs. Flowers 4-merous. Hypanthium narrowly campanulate, strongly 8-ribbed, ca. 3.5 × 1.7 mm, with substellate minute glandular hairs. Sepals ca. 0.7 mm long. Petals asymmetrically elliptic, ca. 3 × 2 mm, thick, pink. Stamen 8, dimorphic, unequal; filaments slightly flat, shorter ones ca. 5.5 mm long, longer ones ca. 8 mm long; anthers narrow, tapering, short ones ca. 5.8 mm long, long ones ca. 8 mm long, both including beak of ca. 1 mm, colour unknown; connective thin, in longer anthers prolonged for ca. 0.7 mm below sacs, appendage in both kinds of anthers a V-shaped body clasping insertion of filament, largest in larger stamens; pore oblique on ventral side of apex. Ovary 4-locular, about half as long as hypanthium and adnate to it for half its length; crown of four almost free slightly cleft small lobes, glabrous; placentas slightly protruding on thick stalks. Style ca. 13 mm long, basally with minute uni-seriate gland-tipped hairs, stigma small. — Buds and flowers in May. — Fig. 1, A-F; 2, A.

DISTRIBUTION AND HABITAT : Vietnam (Fig. 2, A). Forest at 1200 m altitude.

NOTES : Among the three species with large many-flowered thyrses *P. costata* can be recognized by its indumentum of substellate minute glandular hairs, dense at least on stem and petioles, and patent stout shaggy hairs. In *P. trimera* and *P. allomorphioidea* only minute brown glandular hairs occur and mostly sparsely. The very distinctly ribbed hypanthium in bud and flower (Fig. 1, A) also is a good character for *P. costata* (the name refers to it), but the hypanthia of the other species may be faintly ribbed or sulcate. *P. costata* is large-leaved.

Poilannammia trimera C. Hansen, *sp. nov.*

Floribus trimeris recognoscenda.

TYPE : *Poilane* 31484, Annam, près du village Moï de « Go Oi » sud-ouest de la province de Quang Nam (holo-, P).

Shrub to about 2 m high, glabrous or with minute brown glands, very sparse all over or dense in inflorescence. Stem flat distally, soon becoming terete; internodes 2-6 cm long. Petioles 3-7.5 cm long; blade 16.5-30 × 7-12 cm; base rounded, apex acuminate, margin

entire; 3-nerved. Inflorescence to 18 cm long; peduncle flat, to 10.5 cm long; bracts inconspicuous, subulate; pedicels to 1 mm long in bud. Flowers 3-merous, known only in bud. Hypanthium narrowly urceolate, faintly 6-ribbed, ca. 3×1.2 mm in bud, with sparse minute brown glands. Petals immature, pinkish in bud, whitish in flower. Stamens 6, isomorphic, subequal; anther connective forming a V-shaped body basally, clasping filament, ventral arms slightly connate in front of filament, almost filiform, less than one third the length of anther. Ovary 3-locular, crown of slightly connate lobes; placentas not vertically elongated, protruding into locules on short stalks. Style glabrous. — Specimens in young bud collected in February. — Fig. 2, B; 3, H.

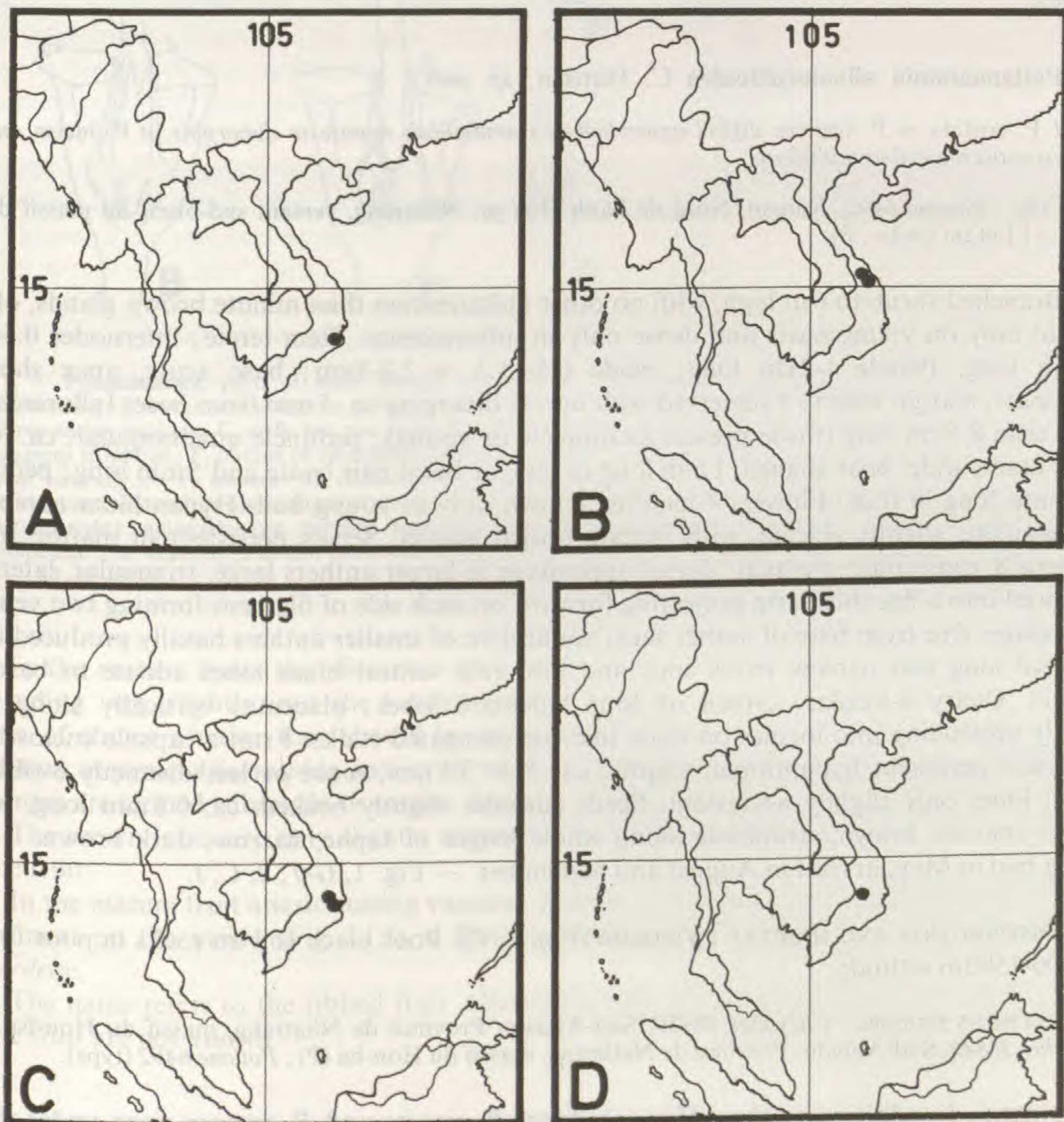


Fig. 2. — *Poilannammia*, total distributions : A, *P. costata* ; B, *P. trimera* ; C, *P. allomorphaidea* ; D, *P. incisa*.

DISTRIBUTION AND HABITAT : Vietnam (Fig. 2, B). On granitic soil in high forest at 500-1000 m altitude.

SPECIMENS STUDIED : *Poilane* 31353, Annam, sud ouest de Tramy, prov. du Quang Nam (P); *Poilane* 31484 (type); *Poilane* 31656, Annam, confins sud de la prov. du Quang Nam entre les villages Moï de « Gò O et Mò O » (P).

NOTES : *P. trimera* differs from the three other species in its 3-merous flowers. Besides its ventral staminal appendages are long and slender (Fig. 3, H). Its leaves are much larger than in any of the other species, and may be twice as long as in *P. costata*, the other large-leaved species.

***Poilannammia allomorpioidea* C. Hansen, sp. nov.**

A P. costata et P. trimera differt appendicibus staminalibus manifeste dimorphis, a P. incisa autem inflorescentiis majoribus multifloris.

TYPE : *Poilane* 6492, Annam, Nord de Ninh Hoa pr. Nhatrang, versant sud-ouest du massif de la Mère et l'Enfant (holo-, P).

Branched shrub to 6 m high, with no other indumentum than minute brown glands, often present only on young parts and dense only in inflorescence. Stem terete; internodes 0.5-2.5 (-4) cm long. Petiole 1-2 cm long; blade 6.5-11.5 × 2.2-5 cm; base acute, apex shortly acuminate, margin entire; 3-plinerved with nerves diverging ca. 5 mm from base. Inflorescence more than 8.5 cm long (those present incomplete or young); peduncle quadrangular, ca. 6 cm long; bracts wide, boat-shaped, 1 mm long or less, or basal pair ovate and 5 mm long; pedicels ca. 5 mm long in fruit. Flowers 4-merous, known only in young bud. Hypanthium narrowly campanulate, slightly sulcate, with minute brown glands. Sepals persistent in mature fruit. Stamens 8, dimorphic, unequal; dorsal appendage in larger anthers large, triangular, laterally produced into a flat short arm projecting forward on each side of filament forming two ventral appendages free from base of anther sacs; connective of smaller anthers basally produced into a dorsal long and narrow terete spur and into two ventral blunt lobes adnate to base of anthers. Ovary 4-locular; crown of four bidentate lobes; placentas vertically elongated, slightly protruding into locules on thick likewise elongated stalks. Fruit a capsule enclosed in the intact persistent hypanthium, elliptic, ca. 5 × 3.5 mm, more or less distinctly 8-ribbed, crown lobes only slightly accrescent. Seeds cuneate, slightly beaked, ca. 0.8 mm long, testa almost smooth, brown, strophiole along whole length of raphe, narrow, dark brown. — In young bud in May, in fruit in August and September. — Fig. 1, G-J; 2, C, I.

DISTRIBUTION AND HABITAT : Vietnam (Fig. 2, C). Poor black soil on rocks in poor forest at 1000-1500 m altitude.

SPECIMENS STUDIED : *Chevalier* 38759, Sud-Annam, Province de Nhatrang, massif du Hon-ba (P); *Chevalier* 38848, Sud-Annam, Province de Nhatrang, massif du Hon-ba (P); *Poilane* 6492 (type).

NOTES : In addition to the differences from *P. costata* and *P. trimera* given under these species *P. allomorpioidea* differs in its distinctly dimorphic staminal appendages (Fig. 3, I).

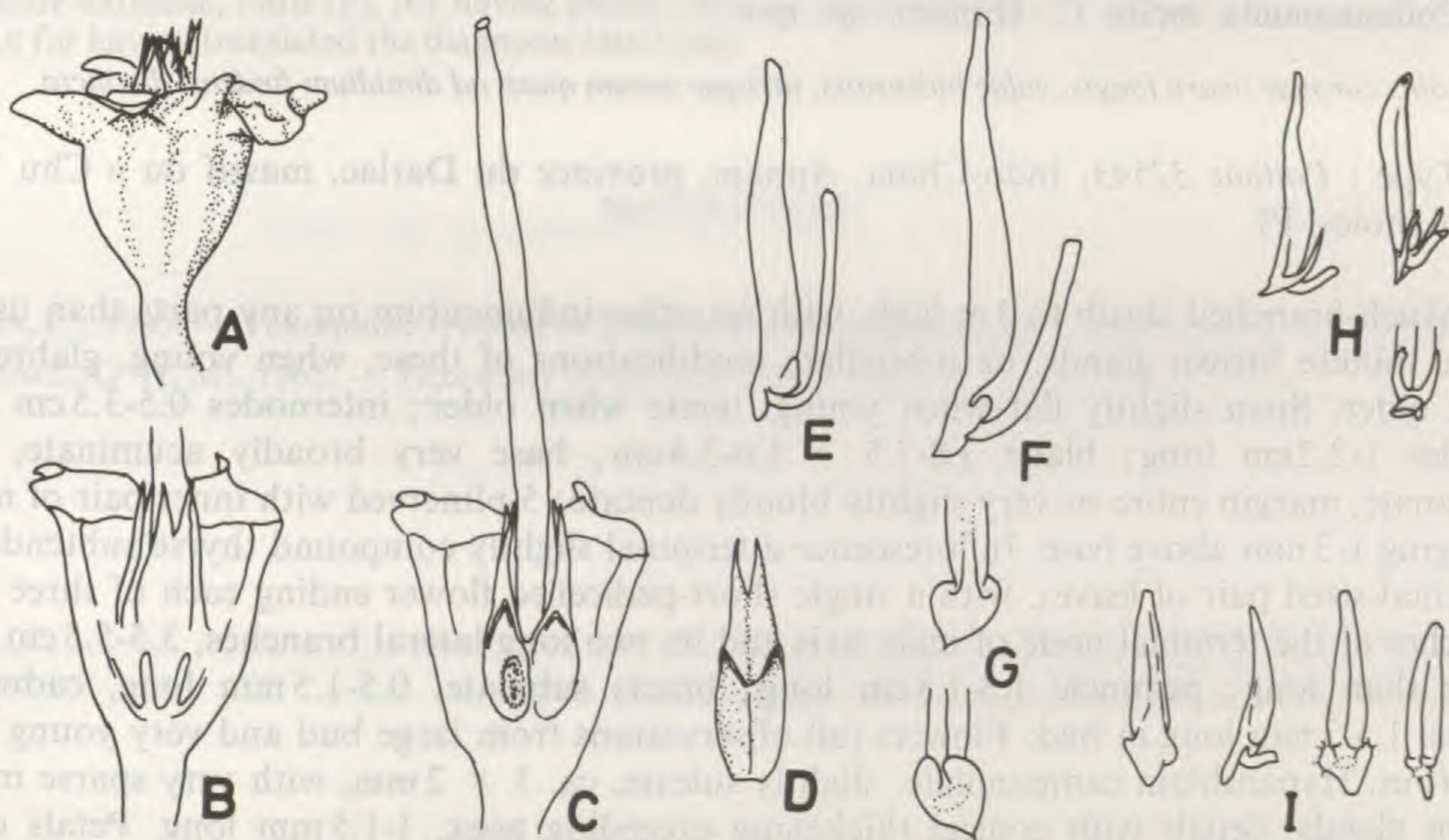


Fig. 3. — *Poilannammia*, parts of buds, flowers and fruits. — *P. incisa* : A, very young fruit with crown lobes protruding; B, longitudinal section of large bud (petals and stamens removed) showing crown lobes and depth of three anther pockets; C, as B, but one valve removed; D, removed valve from the inside; E, outline of epipetalar stamens from bud; F, outline of episepalar stamen from bud; G, episepalar stamen, outline of appendages dorsally and ventrally. — *P. trimera* : H, outlines of stamens from young bud : epipetalar one laterally, episepalar one latero-ventrally and its appendages ventrally. — *P. allomorphioides* : I, outlines of stamens from young bud (from left to right) : episepalar one dorsally, epipetalar one laterally, episepalar one ventrally (filament removed), and epipetalar one ventrally (filament removed). (A-G, *Poilane* 32543 in P; H, *Poilane* 31484 in P; I, *Poilane* 6492 in P. — All ca. $\times 6$).

In the mature fruits the placentas are clearly seen to be much longitudinally elongated protruding very slightly into the locules on low equally elongated stalks (Fig. 1, I). It is a matter of choice whether they should be termed stalked or sessile and they approach the condition in some *Allomorpha* species in which it similarly is a matter of choice whether the placentas are termed sessile or sessile, the latter being characteristic in that genus.

The crown lobes are only slightly accrescent and still are distinctly bidentate at maturity of the fruit.

In the mature fruit anastomosing vascular strands of the valves have enlarged and become prominent on the inside (Fig. 1, J), a feature which so far is not known elsewhere in the *Sonerileae*.

The name refers to the ribbed fruit *Allomorpha*-like at maturity (Fig. 1, G). Older stages of the fruit are not known.

Poilannammia incisa C. Hansen, *sp. nov.*

Lobis coronae ovarii longis, valde bidentatis, utroque eorum quasi ad dimidium findenti distincta.

Type : *Poilane* 32543, Indo-China, Annam, province du Darlac, massif du « Chu Yang Sinh » (holo-, P).

Much-branched shrub to 3 m high, with no other indumentum on any parts than usually sparse minute brown glands, or substellate modifications of these, when young, glabrescent when older. Stem slightly flat when young, terete when older; internodes 0.5-3.5 cm long. Petioles 1-2.2 cm long; blade 3.8-7.5 × 1.6-3.4 cm; base very broadly acuminate, apex acuminate, margin entire or very slightly bluntly dentate; 5-plinerved with inner pair of nerves diverging 1-3 mm above base. Inflorescence a terminal slightly compound thyrses subtended by a normal-sized pair of leaves, with a single short-pedicelled flower ending each of three short branches at the terminal node of main axis and its two long lateral branches, 3.5-5.5 cm long, wider than long; peduncle 1.3-1.8 cm long; bracts subulate, 0.5-1.5 mm long, caducous; pedicel 1.5-3 mm long in bud. Flowers (all observations from large bud and very young fruit) 4-merous. Hypanthium campanulate, slightly sulcate, ca. 3 × 2 mm, with very sparse minute brown glands. Sepals with conical thickening exceeding apex, 1-1.5 mm long. Petals ovate, rounded basally, acute apically, ca. 6 × 4 mm, slightly thick, white or very pale purple. Stamen 8, slightly dimorphic, unequal; anthers narrowly ovate, with a dorsal and two ventral appendages, pinkish; dorsal appendage in episeptal anthers wide, flat, triangular, pointed into a uni-seriate small hair and with a few such ones along margin also, basally passing into two lobes projecting forward and forming ventral appendages, connective slightly prolonged between sacs and appendages; appendages in epipetalous anthers similar in principle though apparently slightly different morphologically, connective hardly prolonged between anther and appendages. Ovary 4-locular, slightly longer than half the length of hypanthium and adnate to it for half its length, glabrous, crowned with four long deeply incised (bidentate) lobes tightly around style and exceeding hypanthium; placentas not vertically elongated, protruding into locules on narrow but stout stalks. Style glabrous. Fruits and seeds unknown. — Buds and flowers in April. — Fig. 2, D; 3, A-G.

DISTRIBUTION AND HABITAT : Vietnam (Fig. 2, D). On granite in old forest at 200 m altitude.

SPECIMENS STUDIED : *Poilane* 32523, Annam, prov. du Darlac, massif du « Chu Yang Sinh » (P); *Poilane* 32543 (type).

NOTES : *P. insisa* can be recognized by its conspicuously bidentate crown lobes which are relatively longer and far more deeply split than seen anywhere else in the *Sonerileae* (Fig. 3, B, D). They exceed the hypanthium in bud and can be distinctly seen to protrude in young fruits shortly after flowering.

The species has no indumentum other than minute brown glands or substellate modifications of these on young parts. The leaves are pale green below and dark green above. The inflorescence as described may also be helpful in recognizing *P. incisa*.

ACKNOWLEDGEMENTS : I wish to thank the Laboratoire de Phanérogamie, Muséum national d'Histoire naturelle, Paris (P), for having placed their herbarium material at my disposal, and Anne Fox MAULE for having translated the diagnoses into Latin.

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